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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,037	12/06/2001	Christopher Plush	RJENK1.1C1C2	5774

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KNOBBE MARTENS OLSON & BEAR LLP
2040 MAIN STREET
FOURTEENTH FLOOR
IRVINE, CA 92614

EXAMINER

CHOW, CHARLES CHIANG

ART UNIT	PAPER NUMBER
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2685

DATE MAILED: 07/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/023,037

Applicant(s)

PLUSH ET AL.

Examiner

Charles Chow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 08/966,800.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) ☐ Other: _____

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Detailed Action

1. It is acknowledged that applicants' preliminary amendments are entered.

Priority

2. It is acknowledged that applicants claim the priority benefit based on the continuing data in application 09/721,784 filed 11/22/2000, and in application 08/966,800, filed 11/10/1997, published as US patent 6,173,171, which has foreign priority based on the United Kingdom 9,710,730.4 filed 5/23/1997. the preliminary amendments are entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baum et al. (US 4,979,207) in view of Jagadish et al. (US 6,173,046 B1), and further in view of Janhonen et al. (WO 96/20,570).

Regarding **claim 27**, Baum et al. (also as Baum in below) discloses a method for generating billing data for subscribers in a telecommunication system by administering a shared usage plan. Because Baum discloses a unique cellular telephone billing system for processing call detail data for a shared multi-line customers, and each multi-line customer has user-employees (abstract, figure in cover page, Fig. 1-5, col. 1, lines 9-12; col. 1, lines 19-31). The

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multi-line customer owns a number of cellular telephones operated by it user-employees, and the consolidate billing and usage information for all cellular telephones, as well as individual bills for each user-employee can be generated according to the unique identification key of each user-employee (col. 2, lines 24-43). Baum discloses the shared usage plan in the record 302 of the customer-detail-pool- file 112, which contains shared plan for: rate plan 326, features charges 327, air time charges 328, landline charges 329, roaming charges 331 (as shown in col. 2, lines 56-68).

Baum discloses the registering a plurality of groups of subscribers (the registered customer-detail-pool-file 112 and shared call-detail-pool-file 110, Fig. 1-2; col. 2, line 56 to col. 3, line 17). Each of said group (multi-line customer) comprises a plurality of subscriber (user-employees) for which a single shared usage plan is held in the record 302 of the customer detail pool file 112 (as shown above, figure in cover page).

Baum discloses the analyzing call data. Because Baum discloses the functional blocks in Fig 2, for analyzing, extracting, selecting, sorting, the call files and records, the customer detail file and records, for generating billing report.

Baum discloses the analyzing call data according to the steps 504-514 (Fig. 5), by associating predetermined key identification number and information with each cellular telephone number for generating call detail pool and customer detail pool from monthly billing pool.

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Baum discloses the sorting of the call detail pool and customer detail pool in accordance with the pre-determined key identification number and information format (step 508, Fig. 5; col. 4, line 54 to col. 5, line 28).

Baum discloses the analyzing call data (call detail records 221, Fig. 2) so as to apply one of a number of different predetermined call charging tariffs (shared plan for: rate plan 326, features charges 327, air time charges 328, landline charges 329, roaming charges 331, as shown in above), to a call made by the subscriber in dependence of the group of which the subscriber is a member, in order to generated charging data (generate user-employee individual bill, according to the key identification, independent of the multi-line customer), for said call and to allow a common charging tariff (the shared rate plan and charges, stored in the record 302) to be applied for each subscriber (user-employee) in a group (multi-line customer) for which a combined subscription is held (the subscription data held in record 320).

Baum discloses the maintaining a record for each group of subscribers, wherein the record includes subscriber identification data for each subscriber and the shared usage allocation assigned to the group. Because Baum discloses the maintaining of the customer detail record 302 (Fig. 3) which has the key identification number 321, electronic serial number 325, for the user-employee, and the customer detail record 302 (Fig. 3) comprising the shared allocation assigned to the group (multi-line customer) with rate plan 325, features plan 327, charges 328-331 (Fig. 3).

Baum does not clearly indicate the assigning a shared usage allocation of an original magnitude to each of said groups that is available for usage by the group at a beginning of a predetermined period, wherein the original magnitude of each shared usage plan is predetermined in accordance with the shared plan held by a group.

Jagadish et al. (also as Jagadish in below) teaches the assigning a shared usage allocation of an original magnitude to each of said groups that is available for usage by the group at a beginning of a predetermined period. Because Jagadish teaches the group billing plan for customer group billing and the customer, who has separate billing accounts, are belonging to the member of a group and the group has a group billing plan stored in the customer profile database 164 of a network (abstract; Fig. 1-2). The call usage price is based on the group billing plan, and also based on the usage by other members of group (abstract; col. 1, lines 4-6; col. 1, lines 23-34). Jagadish teaches the assigning a shared usage allocation of original magnitude having full rate until customer exceeds \$50.00, thereafter, an 10% discount is applied (col. 4, line 51 to col. 5, line 12).

Jagadish teaches the original magnitude of each shared usage plan is predetermined in accordance with the shared plan held by a group. Because Jagadish teaches the original magnitude of \$50.00 or \$1000.00 in accordance with the shared group billing plan (col. 3, lines 41-60). Jagadish teaches the stored information specifying shared members of a billing group, and storing information specifying a group billing plan for members to share, in order to determine a priced call value for the call placed by a member based on the group billing plan, with more discounts to which the group is entitled (col. 6, line 9 to col. 8, line 12).

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Jagadish provides a group billing plan with separate member's billing account, such that the members of the group can be benefited by a discount price from the group billing plan (col. 1, lines 9-27). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Baum, and to include Jagadish's group billing plan shared by members, such that the members could be benefited by a discount price from the group billing plan.

In the above, it does not clearly indicate the determining if a subscriber of one of said groups uses a telecommunications service; accessing, upon determining that the subscriber uses the telecommunications service, the record for the group of which the subscriber is a member.

Janhonen teaches the determining if a subscriber of one of said groups uses a telecommunications service; accessing, upon determining that the subscriber uses the telecommunications service, the record for the group of which the subscriber is a member.

Because Janhonen teaches the method for improving the charging criteria (title, abstract, page 1, lines 4-12; page 5, line 19 to page 6, line 12). Janhonen teaches the determining if a subscriber is one of the group user based on the stored records. Because Janhonen teaches the analyzing a member's call for various call tariffs, based upon whether the subscriber is belonging to the group of special cells and/or whether the subscriber numbers belong to the subscriber group (abstract), as the claimed determining if a subscriber of one of groups uses the telecommunication service and accessing the record for the group. Janhonen teaches the charging criteria for the member of a special group, such that usage charge can be improved based on the charging criteria for the special group (page 5, lines 7-22). Therefore, it would

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have been obvious to one of ordinary skill in the art at the time of invention to modify Baum above, and to include Janhonen's charging criteria for the member of a special group, such the member's usage charge can be improved based on the group special charge criteria.

Regarding **claim 28**, referring to Jagadish above for the original magnitude is a predetermined number of minutes (the full rate until customer exceeds \$50.00 for a 10% discount; and adjusting of the charges for old calls for a given billing period, as shown in Fig. 1b, Fig. 2, col. 4, line 51 to col. 5, line 12).

Regarding **claim 29**, referring to Jagadish above for the original magnitude is a predetermined amount of money, \$1000-10% for customer group 1, \$50-10% for customer A group 1 (blocks 166, 167 in Fig. 1b; col. 3, lines 41-60; col. 4, line 51 to col. 5, line 12).

Regarding **claim 30**, referring to Baum, Jagadish, Janhonen, above for: a method of generating billing data for subscribers in a telecommunication system; the storing subscriber records for plurality of groups of subscribers for which a combined subscription is held for different numbers of subscribers (Baum above); the relating shared usage allocation (Jagadish above) of an original magnitude at the start of each predetermined period; the shared usage allocation being predetermined in accordance with the subscription type of each group; the analyzing call data so as to apply different call charge tariffs independence of the group (Baum's user identification key) in order to generate charging data and to allow a common charging tariffs (Baum above) to be applied for each subscriber for which a

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combined subscription is held (Baum) when shared usage allocation has been exhausted (Jagadish above).

Conclusion

4. In the above disclosures, Baum discloses a unique cellular telephone billing system for processing call detail data for a shared multi-line customers, and each multi-line customer has user-employees. Baum discloses the multi-line customer owns a number of cellular telephones operated by its user-employees, and the consolidated billing and usage information for all cellular telephones, as well as individual bills for each user-employee can be generated according to the unique identification key of each user-employee. Baum discloses the shared usage plan in the record 302 of the customer-detail-pool- file 112, which contains shared plan for: rate plan 326, features charges 327, air time charges 328, landline charges 329, roaming charges 331. Baum discloses the registering a plurality of groups of subscribers (the registered customer- detail-pool-file 112 and shared call-detail-pool-file 110. Each of said group (multi-line customer) comprises a plurality of subscriber (user-employees) for which a single shared usage plan is held in the record 302 of the customer detail pool file 112 .

Baum discloses the analyzing call data. Because Baum discloses the functional blocks in Fig 2, for analyzing, extracting, selecting, sorting, the call files and records, the customer detail file and records, for generating bill report). Baum discloses the analyzing call data according to the steps 504-514, by associating predetermined key identification number and information with each cellular telephone number for generating call detail pool and customer detail pool from monthly billing pool. Baum discloses the sorting of the call detail pool and customer detail pool in accordance with the pre-determined key identification number and

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information format. Baum discloses the analyzing the call detail records 221 so as to apply one of a number of different predetermined call charging tariffs (shared plan for: rate plan 326, features charges 327, air time charges 328, landline charges 329, roaming charges 331, as shown in above), to a call made by the subscriber in dependence of the group of which the subscriber is a member, in order to generated charging data (generate user-employee individual bill, according to the key identification, independent of the multi-line customer), for said call and to allow a common charging tariff (the shared rate plan and charges, stored in the record 302) to be applied for each subscriber (user-employee) in a group (multi-line customer) for which a combined subscription is held (the subscription data held in record 320). Baum discloses the maintaining a record for each group of subscribers, wherein the record includes subscriber identification data for each subscriber and the shared usage allocation assigned to the group. Because Baum discloses the maintaining of the customer detail record 302 (Fig. 3) which has the key identification number 321, electronic serial number 325, for the user-employee, and the customer detail record 302 (Fig. 3) comprising the shared allocation assigned to the group (multi-line customer) with rate plan 325, features plan 327, charges 328-331 (Fig. 3).

Jagadish teaches the group billing plan for customer group billing and the customer, who has separate billing accounts, are belonging to the member of a group and the group has a group billing plan stored in the customer profile database 164 of a network. The call usage price is based on the group billing plan, and also based on the usage by other members of group.

Jagadish teaches the assigning a shared usage allocation of original magnitude having full rate until customer exceeds \$50.00, thereafter, an 10% discount is applied. Jagadish teaches

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the original magnitude of each shared usage plan is predetermined in accordance with the shared plan held by a group. Because Jagadish teaches the original magnitude of \$50.00 or \$1000.00 in accordance with the shared group billing plan. Jagadish teaches the stored information specifying shared members of a billing group, and storing information specifying a group billing plan for members to share, in order to determine a priced call value for the call placed by a member based on the group billing plan, with more discounts to which the group is entitled. Jagadish provides a group billing plan with separate member's billing account, such that the members of the group can be benefited by a discount price from the group billing plan.

Janhonen teaches the method for improving the charging criteria. Janhonen teaches the analyzing a member's call for various call tariffs, based upon whether the subscriber is belonging to the group of special cells and/or whether the subscriber numbers belong to the subscriber group (abstract), as the claimed determining if a subscriber of one of groups uses the telecommunication service and accessing the record for the group. Janhonen teaches the charging criteria for the member of a special group, such that usage charge can be improved based on the charging criteria for the special group.

5. The cited pertinent prior arts are listed below:

- A. US 6,018,652, January 2000, Frager et al. teaches the special charging rates for number of charging regions for the moving cellular telephone subscribers into different areas (as shown in abstract, figure in cover page; Fig. 1-5; col. 1, lines 9-11; col. 1, line 45 to col. 2, line 21).

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Chow whose telephone number is (703)-306-5615.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (703)-305-4385.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to: (703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.



Charles Chow

July 23, 2003.